

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AP/IFW

Applicant: Robert Starkston et al.

Title: METHODS FOR LASER SCRIBING WAFERS

Docket No.: 884.949US1

Filed: September 30, 2003

Examiner: Samuel M Heinrich

Serial No.: 10/674,960

Due Date: February 17, 2007

Group Art Unit: 1725

MS Appeal Brief - Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

By: 

Atty: Richard E. Billion

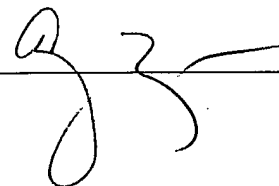
Reg. No. 32,836

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Name

Amy Moriarty

Signature



SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)



S/N 10/674,960

PATENT

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Assignee: Intel Corporation

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RESPONSE TO NOTICE OF NON-COMPLIANT APPEAL BRIEF

MS Appeal Brief- Patents
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This responds to the Notice of Non-Compliant Appeal Brief mailed on January 17, 2007.
In compliance with MPEP 1205.03(B) and 37 CFR 41.37(c)(1)(v), Appellant submits the following corrected section from Appellant's previously-submitted Appeal Brief filed December 8, 2006.

Please replace the previously-submitted Summary of Claimed Subject Matter Section 5 with the below replacement:

5. SUMMARY OF CLAIMED SUBJECT MATTER

Some aspects of the present inventive subject matter include, but are not limited to, a method for laser scribing including laser scribing a first continuous line 710, laser scribing a second continuous line spaced apart from the first continuous line 712, and laser scribing a third continuous line, the third continuous line positioned between the first continuous line and the second continuous line 714. In another embodiment, the inventive subject matter includes laser treating a first area of the wafer 1010, laser treating a second area adjacent the first area 1012 and laser scribing a third continuous line, the third continuous line positioned between the first area and the second area 714. The inventive subject matter also includes an apparatus that includes a laser 110 adapted to direct laser energy toward a wafer 120, a saw 150, a microprocessor 2004 for controlling the direction of the laser energy and controlling the movement of the saw; and a memory 2032 operatively coupled to the microprocessor 2004. The memory 2032 includes an instruction set 1310 to cause a suitably programmed apparatus to laser scribe a first continuous line on a wafer 710, and laser scribe an area near the first continuous line but not contacting the first continuous line 712.

The subject matter of independent claim 16 is directed toward a method 700, 800 for laser scribing a wafer that includes laser scribing a first continuous line 710, 810 laser scribing a second continuous line spaced apart from the first continuous line 712, 812 and laser scribing a third continuous line, the third continuous line positioned between the first continuous line and the second continuous line 714, 814.

The subject matter of claim 23 is directed toward a method 800 for singulating dies from a wafer that includes laser scribing a first continuous line 810, laser scribing a second continuous line spaced apart from the first continuous line 812, laser scribing a third continuous line, the third continuous line positioned between the first continuous line and the second continuous line 814, and passing a saw through the area of the first continuous line, the second continues line and

the third continuous line to cut the wafer 816.

The subject matter of claim 29 is directed toward an apparatus 100 that includes a laser 110 adapted to direct laser energy toward a wafer 120, a saw 150, a microprocessor 2004 for controlling the direction of the laser energy and controlling the movement of the saw 150, and a memory 2032 operatively coupled to the microprocessor 2004. The memory 2032 includes an instruction set 1310 to cause a suitably programmed apparatus to laser scribe a first continuous line on a wafer 710, and laser scribe an area near the first continuous line but not contacting the first continuous line 712.

The subject matter of claim 32 is directed toward a method 1000 for laser scribing a wafer that includes laser treating a first area of the wafer 1010, laser treating a second area adjacent the first area 1012 and laser scribing a third continuous line, the third continuous line positioned between the first area and the second area 714.

This summary does not provide an exhaustive or exclusive view of the present subject matter, and Appellant refers to the appended claims and its legal equivalents for a complete statement of the invention.

Appellant respectfully requests that the Examiner withdraw the non-compliant status and examine the Appeal Brief.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

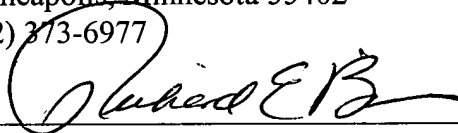
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Signature

